

### **Amendments to the Claims**

Claims 1- 47 (cancelled).

Claim 48 (new): A method of forming a metal-comprising material comprising:

- providing a semiconductor substrate;
- exposing one or more metallo-organic precursors to a reducing atmosphere comprising one or both of  $\text{NH}_3$  and an activated hydrogen species to release metal from the one or more precursors, wherein the precursors comprise carbon and not Ti or Pt during the exposing; and
- depositing the released metal over the semiconductor substrate to form a metal-comprising material on the semiconductor substrate.

Claim 49 (new): The method of claim 48 wherein the substrate comprises an upper surface comprising one or more of Ti, WN, and Ta.

Claim 50 (new): The method of claim 48 wherein the substrate comprises an oxidizable upper surface and wherein the metal-comprising material is formed physically against the upper surface.

Claim 51 (new): The method of claim 48 wherein the one or more precursors comprise one or more of ruthenium, rhodium, iridium, cobalt, palladium, and nickel.

Claim 52 (new): The method of claim 48 wherein the one or more precursors comprise tricarbonyl-cyclohexadiene ruthenium.

Claim 53 (new): The method of claim 48 wherein a hydrogen species of the activated hydrogen species comprises H<sub>2</sub>.

Claim 54 (new): The method of claim 48 wherein the substrate comprises an upper surface comprising one or more of Ti, WN, and Ta and the upper surface is exposed to the reducing atmosphere during the release of at least some of the metal.